# NATIONAL AERONAUTICS AND SPACE ADMINISTRATION LYNDON B. JOHNSON SPACE CENTER

# JUSTIFICATION FOR OTHER THAN FULL AND OPEN COMPETITION PURSUANT TO 10 U.S.C. 2304(c)(1) and FEDERAL ACQUISITION REGULATION 6.302-1

- 1. This document is a Justification for Other than Full and Open Competition prepared by the NASA Lyndon B. Johnson Space Center (JSC).
- 2. The nature and/or description of the action being approved:

The Advanced Suit Laboratory of Space Suit and Crew Survival Systems Branch frequently utilizes the MK-III prototype space suit to conduct testing and design tasks in support of advanced development activities. The original MK-III suit was fabricated in 1988 and is continuously upgraded, modified, and refurbished to meet the changing demands of the development programs. The reuse and refurbishment of core MK-III elements has allowed for economical capability upgrades while maintaining continuity with support hardware and personnel. The increased test activity has accelerated the wear of space suit components making the replacement and refurbishment of hardware components a critical task.

### 3. Description of the supplies or services required, include an estimated value:

The functional elements to be performed are the manufacture, test, and delivery of space suit glove disconnects, space suit arm bearings, air inlet and outlet connectors, manifolds, and fittings along with pressure seals for glove, arm, scye, and hatch interfaces that are form, fit, and functionally equivalent to the current Extravehicular Mobility Unit (EMU) suit side glove disconnects and arm bearings and seals; and current MK-III connectors, manifolds, fittings, and seals.

The estimated total price for this project is \$178,409.25.

### 4. Statutory authority permitting other than full and open competition:

The statutory authority permitting other than full and open competition is 10 U.S.C 2304(c)(1). As contemplated by the provisions of Federal Acquisition Regulation (FAR) 6.302-1(b)(1)(ii), unique supplies or services may be deemed to be available from only one or a limited number of sources or suppliers with unique capabilities.

# 5. A demonstration that the proposed contractor's unique qualifications or the nature of the acquisition requires use of the authority cited:

The deliverables/products require expert suit hardware experience in the preparation, maintenance, and operations of the MK-III prototype space suit hardware components. The deliverables also require space suit engineering expertise for the hardware design, usage, and documentation. Fabrication of hardware will be required from an existing design that was originally manufactured at Air-Lock, Inc. NASA does not own the data and design rights to the MK-III and its hardware components and thus cannot fabricate the parts in-house nor

provide the specifications to another contractor. Air-Lock, Inc. is the only vendor with the data and design rights to the MK-III hardware components, therefore, Air-Lock, Inc. is the only vendor capable of fabricating the necessary hardware and spares.

# 6. Description of the efforts made to ensure that offers are solicited from as many potential sources as practicable:

A synopsis for this effort was posted on June 9, 2011; the synopsis closed on June 20, 2011. No other vendors submitted capabilities.

### 7. Determination by the contracting Officer that the anticipated cost to the Government will be fair and reasonable:

The Contracting Officer will establish a fair and reasonable price by obtaining appropriate data for evaluation per FAR 15.402. The contractor's proposal will be evaluated and negotiated to obtain a fair and reasonable price.

# 8. Description of the market survey conducted, and the results, or a statement of the reasons a market survey was not conducted:

No market survey was conducted because Air-Lock, Inc is the only company to produce the required hardware components for the MK-III space suit and NASA does not own the data and design rights to the MK-III and its components.

### 9. Other facts supporting the use of other than full and open competition:

The work contained in the contemplated action builds on work performed by Air-Lock, Inc. This hardware commonality to existing test hardware is beneficial to the Government; to disrupt that continuity would adversely impact the Government's efforts.

#### 10. Sources, if any, that expressed an interest in writing the acquisition:

Interest was expressed by R&R Associates, however, no capabilities were submitted.

# 11. The actions, if any, the Agency may take to remove or overcome any barriers to competition before any subsequent acquisition for the supplies or services required:

The agency will attempt to overcome barriers to competition by continual analysis of alternate products as they come available.

Technical Officer:

I certify that the supporting data presented in this justification are accurate

and complete.

Lindsay Auchison

Contracting Officer's Technical Representative

Contracting Officer: I hereby determine that the anticipated cost to the Government will be fair and reasonable and certify that this justification is accurate and complete

to the best of my knowledge and belief.

LaToy Jones

Contracting Officer

Date